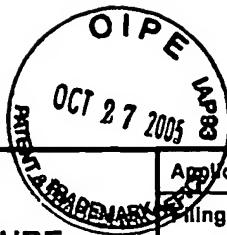


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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Application Number	10/615,117
				Filing Date	07/07/2003
				First Named Inventor	Barin Haskell
				Group Art Unit	2613
				Examiner Name	An, Shawn S.
SHEET	1	OF	3	Attorney Docket Number	APLE.P0035

U.S. PATENT DOCUMENTS						
Examiner* Initials	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	1.	6,493,385	B1	Sekiguchi, et. al.	12-10-2002	
	2.	6,493,386	B1	Vetro, et. al.	12-10-2002	Counterpart patent to EP 1170954  Please see Int'l Search Report (10-01-2004) Form PCT/ISA/210, sheet 7
	3.	6,490,320	B1	Vetro, et. al.	12-03-2002	Counterpart patent to EP 1170954  Please see Int'l Search Report (10-01-2004) Form PCT/ISA/210, sheet 7
	4.	6,574,279	B1	Vetro, et. al.	06-03-2003	Counterpart patent to EP 1170954  Please see Int'l Search Report (10-01-2004) Form PCT/ISA/210, sheet 7

RELATED U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number	Date of filing MM-DD- YYYY	Name of Patentee or Applicant of Cited Document	Related Application Data
	5.	US 2004/0131121	A1	07-08-2004	Dumitras, et. al.  This is attorney docket number APLE.P0040, a related application

FOREIGN PATENT DOCUMENTS								
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	6.	EP	1170954	A1	01-09-2002	Mitsubishi Electric Corp.		
	7.	WO	9922525	A1	05-06-1999	Mitsubishi Electric Corp.	Counterpart publication to US 6493385  Please see Int'l Search	

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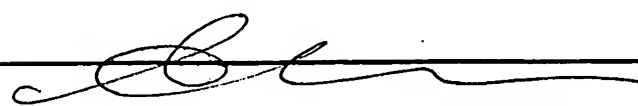
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				Examiner Name	An, Shawn S.
SHEET	2	OF	3	Attorney Docket Number	APLE.P0035

FOREIGN PATENT DOCUMENTS							
							Report (10-01-2004) Form PCT/ISA/210, sheet 7
	8.	AU	3054701	A	08-20-2001	Mitsubishi Electric Corp.	Counterpart patent to EP 1170954  Please see Int'l Search Report (10-01-2004) Form PCT/ISA/210, sheet 7
	9.	WO	0160075	A1	08-16-2001	Mitsubishi Electric Corp.	Counterpart patent to EP 1170954  Please see Int'l Search Report (10-01-2004) Form PCT/ISA/210, sheet 7
	10.		International Search Report		10-01-2004		International Search Report for APLE.P0040PCT

*Document  
not  
found.*

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				Filing Date	07/07/2003
				First Named Inventor	Barin Haskell
				Group Art Unit	2613
				Examiner Name	An, Shawn S.
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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
SP	11.	WIEGAND T., et. al., "Lagrange Multiplier Selection in Hybrid Video Coder Control," <i>Proceedings 2001 International Conference on Image Processing</i> , October 7, 2001, pages 542-545, vol. 1 of 3, conf. 8, IEEE, US.		
SP	12.	MEI-YIN, SHEN, et. al., "Fast Compression Artifact Reduction Technique Based on Nonlinear Filtering," <i>Proceedings of the 1999 IEEE International Symposium on Circuits and Systems</i> , May 30, 1999, pages 179-182, IEEE, US.		
SP	13.	SCHWARZ, H., et. al., "An Improved H.26L Coder Using Lagrangian Coder Control," <i>ITU Telecommunications Standardization Sector Study Group 16</i> , October 18, 2001, pages 1-8, (whole document).		
SP	14.	SEGALL C. A., et. al., "Pre- and Post-Processing Algorithms for Compressed Video Enhancement," <i>Conference Record of the 34<sup>th</sup> Asilomar Conference on Signals, Systems, &amp; Computers</i> , October 29, 2000, pages 1369-1373, vol. 2 of 2, conf. 34, IEEE, US.		
SP	15.	SEUNGJOON, YANG, et. al., "Blocking Effect Removal Using Regularization and Dithering," <i>1998 International Conference on Image Processing</i> , October 4, 1998, pages 415-419, IEEE Comput. Soc., US.		
SP	16.	MEI-YIN, SHEN, et. al., "Real-time Compression Artifact Reduction Via Robust Nonlinear Filtering," <i>1999 International Conference on Image Processing</i> , October 24, 1999, pages 565-569, IEEE, US.		
SP	17.	DUMITRAS, A., et. al., "Enhancement of Direct Mode Selection in B Pictures for Bit Rate Reduction of Compressed Video Sequences," <i>2003 International Conference on Image Processing</i> , September 14, 2003, pages 825-828, vol. 3, IEEE, US.		
SP	18.	KOSSENTINI, F., et. al., "Predictive RD Optimized Motion Estimation for Very Low Bit-Rate Coding," <i>IEEE Journal on Selected Areas in Communications</i> , December 1, 1997, pages 1752-1763, vol. 15, no. 9, IEEE Inc., New York, US.		
SP	19.	ZHU Q.-F., et. al., "Image Reconstruction for Hybrid Video Coding Systems," <i>Data Compression Conference</i> , March 24, 1992, pages 229-238, IEEE Comput. Soc., US.		

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First Named Inventor	Barin G. Haskell
Group Art Unit	2613
Examiner Name	An, Shawn S.
Attorney Docket Number	APLE.P0035

Sheet 1 of 2

### U.S. PATENT DOCUMENTS

Examiner's Initials	Cite No. <sup>1</sup>	U.S. Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
SP	1.	5,790,131	A	08-04-1998	Liang, et al.	
SP	2.	5,867,221	A	02-02-1999	Pullen, et al.	
SP	3.	5,872,598	A	02-16-1998	Legall, et al.	
SP	4.	5,923,376	A	07-13-1999	Pullen, et al.	

### FOREIGN PATENT DOCUMENTS

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known) <sup>5</sup>				
SP	5.	AU	2,597,697	A	10-22-1997	Iterated Systems, Inc.	See Int'l. Search Rep.- Form PCT/ISA/210 (Counterpart to US 5923376 A)	
SP	6.	AU	3,208,897	A	12-05-1997	Iterated Systems, Inc.	See Int'l. Search Rep.- Form PCT/ISA/210 (Counterpart to US 5790131 A)	
SP	7.	EP	0,890,265	A1	01-13-1999	Iterated Systems, Inc.	See Int'l. Search Rep.- Form PCT/ISA/210 (Counterpart to US 5923376 A)	
SP	8.	WO	9,737,495	A1	10-09-1997	Iterated Systems, Inc.	See Int'l. Search Rep.- Form PCT/ISA/210 (Counterpart to US 5923376 A)	

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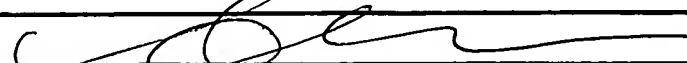
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Sheet	2	of	2	Attorney Docket Number	APLE.P0035

FOREIGN PATENT DOCUMENTS							
	9.	WO	9,743,860	A1	11-20-1997	Iterated Systems, Inc.	See Int'l. Search Rep.- Form PCT/ISA/210 (Counterpart to US 5790131 A)

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	10.	CHOI, J., et al., "A Stable Feedback Control of the Buffer State Using the Controlled Language Multiplier Method," <i>IEEE Transactions on Image Processing</i> , September 1, 1994, pp. 546-558, Vol. 3 No. 5, IEEE Inc., New York, US.			
	11.	LEE, W. Y., et al., "Fast Algorithm for Optimal Bit Allocation in a Rate-Distortion Sense," <i>Electronics Letters</i> , September 26, 1996, pp. 1871-1873, Vol. 32 No. 20, Stevenage, Herts, GB.			
	12.	YANG, Y., et al., "Rate-Distortion Optimizations for Region and Object Based Wavelet Video Coding," <i>Conference Record of the 34<sup>th</sup> Asilomar Conference on Signals, Systems &amp; Computers</i> , October 29, 2000, pp. 1363-1368, Vol. 2 of 2 Conf 34, IEEE, New York, US.			

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